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Youth In Transition

Background

Bibliography

Literature Review

CSAP Center for Substance Abuse Prevention
Substance Abuse and Mental Health Services Administration

NCAP National Center for the Advancement of Prevention
Center for Substance Abuse Prevention

YOUTH IN TRANSITION: BACKGROUND PAPER

- **Age:** Adolescents' tobacco, alcohol, and most illicit drug use increases with age; the exception is inhalant use which decreases from 8th through 12th grades (Johnston, O'Malley, & Bachman, 2000).

- **School**: Severe lag between chronological age and school grade places youths at risk for substance abuse (Dembo, Schmeidler, Nini-Gough, & Manning, 1998). Youth in alternative high schools use all substances more than regular school students (Grunbaum et al., 1999). But private school students report higher rates of alcohol use, drunk driving, binge drinking, smoking, marijuana use, and drug-impaired sexual activity than public school students (Valois, Thatcher, Drane, & Reininger, 1997).

- **Development:** Normative transitions from middle school to junior high and from junior high to senior high (Felner, 1993) and normal developmental states can trigger substance use (Hawkins, Catalano, & Miller, 1992). Precocious social skills predict higher rates of subsequent alcohol consumption (Scheier & Botvin, 1998). Boys rated as aggressive in childhood and adolescence are more likely than non-aggressive boys to smoke and drink heavily and take drugs (O'Donnell, Hawkins, & Abbott, 1995; Hawkins, Lishner, & Catalano, 1985).

- **Gender:** Boys more likely than girls to report: driving after drinking, smokeless tobacco use, heavy drinking, lifetime and current marijuana use, current cocaine use, lifetime illegal steroid and inhalant use, initiating cigarette, alcohol, and marijuana use before age 13, smokeless tobacco, alcohol, and marijuana use on school property; and being offered, sold, or given an illegal drug on school property. (Kann et al., 1998; Grunbaum, 1999) More than boys, girls use substances in response to depression, social dysfunction, and other intrapsychic and relationship problems (Disney, Elkins, McGue, & Iacono, 1999; Hops et al., 1999).

- **Place of Residence:** The Northeast and West have the highest adolescent drug use; South has the lowest. South and West have lower rates of drinking. Smoking is lowest in the West (Johnston et al., 2000). No differences in drug use are associated with population density; drug use declining more in urban than in non-urban areas, leaving the latter with higher rates (Johnston et al., 2000). Public housing and homelessness may not elevate alcohol and drug use risks for youth (Williams, Scheier, Botvin, Baker, & Miller, 1997; MacLean, Paradise, & Cauce, 1999; Diaz, Dusenbury, Botvin, & Farmer-Huselid, 1997).

- **Family:** Family history of substance problems and treatment predicts youth substance use (Nye, Zucker, & Fitzgerald, 1995; Loveland-Cherry, Leech, Laetz, & Dielman, 1996; Hops, Davis, & Lewin, 1999; Johnson & Leff, 1999). Family rules against substance use inhibit youth use; rules against use and positive norms toward nonuse are more important than family structure or family conflict. (Abdelrahman, Rodriguez, Ryan, French, & Weinbaum, 1998; Jackson, Henriksen, & Dickinson, 1999; Brody, Flor, Hollett-Wright, McCoy, & Donovan, 1999; Su, Hoffman, Gerstein, & Johnson, 1997; Fletcher & Jefferies, 1999). For Black youth, drug use is

highest among young people who do not live with either parent (Wallace et al., 1999). But absence of father (female-headed household) may not increase risk (Friedman, Ali, & McMurphy, 1998).

- **Trauma:** Social trauma (absence of family support, prostitution, illicit economic activity, bodily danger), homelessness, and sexual abuse are associated with increased substance use among adolescents (Sullivan, 1996; Baron, 1999; Chandy, Blum, & Resnick, 1997). Trauma of learning disability can predict substance abuse (Karacostas & Fisher, 1993). Perversely, involvement with family violence may help pregnant adolescents stop abusing alcohol (Wiemann & Berenson, 1998).

- **Work:** Youth who work have higher rates of substance use; these rates can persist into adulthood (Ploeger, 1997; Mihalic & Elliott, 1997).

- **Sexual Orientation:** Gay youth have extremely high rates of alcohol, marijuana, and cocaine/crack use (Rotherman-Borus, Rosario, Koopman, & Davis, 1994).

- **Ethnicity:** White youth are more likely than Black or Hispanic youth to report drunk driving; cigarette use; initiating cigarette use before age 13; cigarette use on school property; smokeless tobacco use; smokeless tobacco use on school property; lifetime and current alcohol use; episodic heavy drinking; lifetime and current cocaine use; and lifetime "crack," steroid, inhalant, and other illegal drug use. Hispanic youth more likely than White or Black youth to report riding with a driver who had been drinking alcohol; driving after drinking alcohol; current cigarette use; lifetime and current alcohol use; episodic heavy drinking; lifetime and current cocaine use; lifetime "crack," steroid, inhalant, and other illegal drug use; initiating cigarette, alcohol, marijuana, and cocaine use before age 13; alcohol and marijuana use on school property; and being offered, sold, or given an illegal drug on school property (Kann et al., 1998). Native American youth drink, use inhalants, and use smokeless tobacco more than any other group (Schinke, 1996). Acculturation appears to have a role in substance use by Hispanic and Native American youth. (Fraser, Piacentini, Van Rossem, Hien, Rotheram-Borus, 1998; Schinke, 1996).

YOUTH IN TRANSITION: LITERATURE REVIEW

Age

Age is a powerful transition, particularly as youths move from childhood to adolescence. Across both genders and for all ethnic-racial groups, youths' chronological age consistently predicts their increased use of most harmful substances, including tobacco, alcohol, and illicit drugs. Using school grade as surrogate for age, nearly two-thirds (65%) of American youth have tried cigarettes by 12th grade, and over a third (35%) of 12th graders are current smokers. But in 8th grade, less than one-half (44%) of all youth have tried cigarettes, and 18% describe themselves as current smokers (Johnston et al., 2000).

Also illustrative are data on alcohol. Four out of every five students (80%) have consumed alcohol (more than just a few sips) by the end of high school, whereas about one-half (52%) of all youth have done so by 8th grade. In 1999, 62% of 12th graders and 25% of 8th graders report having been drunk at least once. To a considerable degree, illicit drug use patterns by age and school grade tend to parallel those seen for cigarette and alcohol use. Youths' use of inhalants, however, is an exception. For the latest reporting period (1999), lifetime prevalence of inhalant use was 19.7% for 8th graders, 17% for 10th graders, and 15.4% for 12th graders (Johnston et al., 2000).

School

Though school grade change is invariably coincident with chronological age, school carries with it certain transition forces that may influence youths' substance use and abuse. Research shows that youth who do poorly in school are at greater risk for substance use than those progressing normally in school. Recent data indicate that a severe lag between chronological age and school grade is associated with increased use of most substances (Dembo et al., 1998). Further, 1998 data on youth enrolled in the nation's 1,390 alternative high schools – that serve students at risk for school failure or for dropping out of regular high school and students who have been removed from their regular high school because of drug use, violence, or other illegal activity or behavioral problems – face extreme risks for ATOD use (Grunbaum et al., 1999).

Data from the 1998 CDC survey on students in those schools indicate that 90.8% of alternative high school students have tried cigarette smoking, with white students (94.9%) significantly more likely than Black and Hispanic students (82.3% and 90.1%, respectively) to have ever tried cigarette smoking. Approximately two thirds (64.1%) of alternative high school students currently smoke cigarettes. White students (78.6%) are more likely than Black and Hispanic students (43.3% and 53.0%, respectively) to report current cigarette use. Surprisingly, 38.3% of alternative high school students currently smoke cigars, cigarillos, or little cigars.

As for alcohol use, approximately two thirds (64.5%) of alternative high school students nationwide currently drink alcohol. White and Hispanic students (71.1% and 63.9%, respectively) are more likely than Black students (51.8%) to report alcohol use. One-half (49.8%) of all the students consumed greater than or equal to 5 drinks of alcohol in a row recently. Among the alternative high school students, 85.4% had used marijuana. White students (89.4%) were more likely than Black students (77.7%) to have ever used marijuana. Nationwide, 36.1% of alternative high school students had used

some form of cocaine (e.g., powder, crack, or free-base) during their lifetime. And, 27.3% of alternative high school students had sniffed glue, breathed the contents of aerosol spray cans, or inhaled paints or sprays to become intoxicated during their lifetime. As with other findings, White and Hispanic youth (33.9% and 29.8%, respectively) were significantly more likely than Black youth (8.7%) to report inhalant use.

Because school performance is among the most discriminating transitional factors affecting adolescent substance use, comparisons between youth in alternative high schools and those in regular high schools are warranted. For 1998, the latest reporting period, Table 1 makes these comparisons for commonly abused substances. The table was constructed with data from the 1998 CDC National Alternative High School Youth Risk Behavior Survey (Grunbaum, 1999) and Monitoring the Future, 1998 results (Johnston et al., 2000).

Table 1. Percentages of Students at Regular and Alternative High Schools Who Report Use of Tobacco, Alcohol, Marijuana, Cocaine, Crack, and Steroids, 1998.

	10th Graders		*12th Graders*	
	Regular	*Alternative*	*Regular*	*Alternative*
Tobacco Use				
Lifetime	57.7	91.1	64.6	90.2
Current	27.6	64.3	35.1	62.2
Alcohol Use				
Lifetime	69.8	92.5	81.4	93.8
Current	38.8	62.7	52.0	67.2
Marijuana Use				
Lifetime	39.6	85.3	49.1	86.8
Current	18.7	52.9	22.8	51.2
Cocaine Use				
Lifetime	7.2	36.4	9.3	36.5
Current	2.4	16.6	2.4	14.1
Lifetime Crack Use	3.9	22.9	4.4	18.9
Lifetime Steroid Use	2.0	9.6	2.7	7.6

Table 1 stunningly reveals elevated rates of substance use for students in alternative high schools relative to their regular high school peers. Differentials of several fold for most comparisons indicate that the transition from regular high school to an alternative school – howsoever it was triggered – carries potent implications for substance abuse prevention and treatment.

Finally, running counter to the notion that if alternative school students use drugs more than regular school students, then private school students may be even better off are recent findings on the heightened risks of substance use among students in private schools. Those findings demonstrate higher rates of alcohol use, drunk driving, binge drinking, smoking, marijuana use, and drug-impaired sexual activity among private school students than among public school students (Valois et al., 1997).

Development

Encompassing a large source of transitional influence, child and adolescent development certainly affect substance use behavior and risk. Normative school transitions, such as moving from elementary school to middle and junior high school and moving from junior high to senior high, are among the most pervasive and important ecological transitions for youth (Felner, 1993). Fortunately, for most young people, these transitions are accompanied by new and adaptive coping skills and by enhanced development outcomes. For some young people, however, school transitions are marked by deteriorated social, behavioral, emotional, and academic performance (Snow, Gilchrist, Schilling, Schinke, & Kelso, 1986a; Snow, Gilchrist, Schilling, Schinke, & Kelso, 1986b). Not unusually, these deteriorations are attended by substance use and abuse (Newcomb & Bentler, 1988).

A host of other childhood and adolescent development factors also influence substance abuse behavior. Such normal phenomena of youth development as changing temperament, negative mood states, and withdrawal contribute to drug problems (Hawkins et al., 1992). In the same review, and elsewhere Hawkins et al. cite research findings on how aggressive behavior among boys can signal later drug problems in adulthood (O'Donnell et al., 1995; Hawkins et al., 1985). At least one report, however, suggests that the relationship between aggression and alcohol use among adolescents is spurious since both behaviors are predicted by a similar set of individual, family, and environmental factors. (White, 1997)

Additional empirical work relates early precocious social skills among adolescents to later substance use (Scheier & Botvin, 1998). Specifically, the research discovered that social competence appears to lead to subsequent alcohol consumption among youth. Superior social skills, in this context, could facilitate group cohesion which could promulgate opportunities for social interaction with older peers, peer modeling of drinking behaviors, and vicarious learning of deviancies.

Gender

Although girls and boys have differing patterns of substance use, the nature and direction of these patterns varies depending on substance and ethnic-racial group. Illustrative are the following findings from the Centers for Disease Control's Youth Risk Behavior Surveillance Survey of the United States, conducted in 1997 (Kann et al., 1998). According to that survey, Black male students (28.2%) were significantly more likely than Black female students (17.4%) to report current cigarette use. White female students (39.9%) were significantly more likely than Hispanic and Black female students (32.3% and 17.4%, respectively) to report current cigarette use, and Hispanic female students (32.3%) were significantly more likely than black female students (17.4%) to do so. White male students (39.6%) were
significantly more likely than Black male students (28.2%) to report current cigarette use.

As for gender differences in alcohol use, the CDC survey revealed that male students in grade 11 (57.8%) were significantly more likely than female students in grade 11 (47.8%) to report current alcohol use. White and Hispanic students (54.0% and 53.9%, respectively) were significantly more likely than Black students (36.9%) to report current alcohol use. This significant difference was identified for both male and female students. Male students in grades 11 and 12 (57.8% and 60.2%, respectively) were significantly

more likely than male students in grades 9 and 10 (44.7% and 48.7%, respectively) to report this behavior.

Patterns of other drug use also varied by gender in the CDC data. Overall, male students (30.2%) were significantly more likely than female students (21.4%) to report current marijuana use. This significant difference was identified for all racial/ethnic subgroups and for grade 11. Male students (4.0%) were significantly more likely than female students (2.4%) to report current cocaine use. Male students (4.1%) were significantly more likely than female students (2.0%) to have ever used illegal steroids. And, male students (17.6%) were significantly more likely than female students (14.1%) to report inhalant use.

Gender differences in the manifestations and handling of psychological and behavioral problems appear to account for some of these patterns in substance abuse rates. More than boys, girls may attend to parental, family, and other relationship conflicts, stresses, and issues, potentially rendering them vulnerable to use substances to maintain emotional stability and reduce social dysfunction and other intrapsychic discomforts (Hops et al., 1999). Illustrative is an investigation finding that relative to boys, girls with attention deficit hyperactivity disorder might be at slightly higher risk for substance abuse (Disney et al., 1999).

Place of Residence

Where youths reside is associated with greater and lessor risk of substance abuse. As a contextual variable, place of residence can also be construed as a transitional factor since youths who change where they reside may encounter differing influences toward and away from substance use. Geographically, substance use rates differ among adolescents according to their region of the country. According to the latest survey data from Monitoring the Future (Johnston et al., 2000), the Northeast and the West have tended to have the highest proportions of students using any illicit drug, and the South the lowest proportion (though these rankings do not apply to many of the specific drugs). In particular, the cocaine epidemic of the early 1980s was much more pronounced in the West and the Northeast than in the other two regions, though the differences decreased as the overall epidemic subsided. While the South and the West once had lower rates of drinking among students than the other two regions had, those differences have narrowed in recent years. Cigarette smoking rates have consistently been lowest in the West. The upsurge of ecstasy use in 1999 occurred primarily in the Northeast (Johnston et al., 2000)

Additional empirical light is on geography as an influence for substance use risk in a study by Herd (1990). Drawn from that study, Table 2 shows the relationship between frequent heavier drinking and race when controlled for region and income. Young white men have much heavier rates of frequent drinking than do young Black men. Though region affects drinking behavior, income also plays a significant role in determining rates, with Black men apparently more sensitive to the effects of income as a moderator or facilitator of alcohol consumption.

Table 2. Non-Frequent and Frequent Heavy Drinking, Black and White Young Men, Age 18 to 29 Years, in Percentages.

Region and Income	*Race*	*Non-Frequent*	*Frequent*

Region and Income	*Race*	*Non-Frequent*	*Frequent*
South	White	40.0	60.0
$6,000 and under	Black	83.0	17.0
South	White	80.5	19.5
$6,001-20,000	Black	81.6	18.4
South	White	75.7	24.3
$20,001 and over	Black	96.8	3.2
Non-South	White	58.8	41.2
$6,000 and under	Black	97.1	2.9
Non-South	White	63.7	36.3
$6,001-20,000	Black	78.2	21.8
Non-South	White	67.3	32.7
$20,001 and over	Black	84.9	15.1

Another residential factor is urbanicity. Interestingly, Johnston et al.'s (2000) Monitoring the Future survey has not shown large or consistent differences in overall illicit drug use associated with population density, which helps to demonstrate just how ubiquitous the illicit drug phenomenon is in this country. In the last few years, the use of a number of drugs has declined more in the urban areas than in the non-urban ones, leaving the non-urban areas with higher rates of use. The recent upsurge in ecstasy use does seem to be concentrated in urban areas, at least so far. Crack and heroin use, however, are not concentrated in urban areas, meaning that no parents should assume their youngsters are immune to these threats simply because they do not live in a city.

Other empirical work has examined substance use among youth who live in public housing and those living in conventional housing (Williams et al., 1997). This research found few differences in drug use behavior among the two groups of youth. In fact, the investigators concluded that living in public housing may buffer youths' perceived alcohol availability and drinking behavior. Finally, research on homeless youth discovered that psychological and interpersonal influences provide regulatory functions in substance abuse behavior and may help to explain the nearly 20% of homeless youth who abstain from alcohol and drugs (MacLean et al., 1999). These conclusions are supported by other work with homeless youth living in shelters (Diaz et al., 1997).

Family

Familial transitions and influences affect adolescent substance use and abuse. When adult members of a family have a history of substance abuse, their adolescent children are at risk for subsequent problems with alcohol and drugs (Johnson & Leff, 1999; Nye et al., 1995; Abdelrahman et al., 1998). More important than family structure and conflict in predicting children's substance use, however, are family management practices. In particular, the institution of clear family rules and norms against substance use has strong inhibiting effecting effects on substance use (Abdelrahman et al., 1998; Jackson et al., 1999; and Brody et al., 1999).. These effects appear particularly salient for adolescent girls (Fletcher & Jefferies, 1999). Indeed, one study found that the deleterious

effects of parental substance abuse per se may attenuate with time (Su et al., 1997). Family rules and norms, however, may persist.

Other work has found that family variables affect youths' risk for later substance abuse beginning as early as the fourth grade and possibly even younger (Loveland-Cherry et al., 1996; Hops et al., 1999). The presence of parents in households with adolescents is of unquestionable importance in youths' later substance use. Among Black youth, drug use is highest among young people who do not live with either parent (Wallace et al., 1999). But the absence of father (i.e., in female-headed households) does not appear to elevate substance abuse risk substantially (Friedman et al., 1998).

Trauma

A variety of social and psychological transitional conditions can impact youth in a traumatic manner to increase their risks of substance abuse. By virtue of youth experiencing these conditions chronically or acutely, various traumata represent a transition and can be understood as such. A study of youth living on the streets, for example, discovered that the combined social trauma of absence of family, prostitution, illicit economic activity, begging, sexual predators, and bodily danger created a profile of great risk for substance abuse, HIV infection, and related problems (Sullivan, 1996). Likewise, other research finds that homeless street youth bring with them a psychosocial profile that promotes drug use (Baron, 1999). As a traumatic transitional event, sexual abuse is also associated with increased substance use among adolescents (Chandy et al., 1997).

Moreover, the traumatic transitional event of a learning disability has been shown to better predict substance abuse among adolescents than gender, ethnicity, age, socioeconomic status, and family composition (Karacostas & Fisher, 1993). Finally, among a sample of alcohol abusing pregnant adolescents, Wiemann and Berenson (1998) discovered that expectant mothers who stopped drinking were more likely to have witnessed or been a victim of or known a victim of violence, a finding with implications for research on trauma and substance abuse specific to young women.

Work

Work among youth is a widespread but poorly understood transitional phenomena. Two studies, both published in 1997, arrive at a single conclusion about the effects of work on adolescent substance use. The first study found a positive association between employment and some forms of delinquency, especially alcohol and drug use (Ploeger, 1997). The investigator posits that employment may expose adolescents to delinquent peers.

The second study similarly discovered negative short-term effects from work for adolescents in the areas of school, family and friend bonding, beliefs, and substance use (Mihalic & Elliott, 1997). A few of these effects were seen to persist into adulthood. Moreover, youth who work more years during adolescence report higher rates of alcohol and marijuana use and less conventional beliefs at ages 27 and 28 years. The investigator suggests that a long-term beneficial effect of work during adolescence may be a positive relationship to employability during adulthood.

Sexual Orientation

As a transitional event, sexual orientation carries serious implications for substance abuse risk among adolescents. Though the research base is thin, available data indicate that gay youths encounter extraordinary opportunities for alcohol and drug use. One study found that 25% of a sample of New York City gay youth bartered sex for money or drugs (Rotherman-Borus et al., 1994). Further, though these youth did not report injecting drugs, they may engage in risky sexual acts under the influence of alcohol or drugs. And, lifetime prevalence rates for alcohol, marijuana, cocaine/crack among these youth are between 50% and 13 times higher than national norms. Frequency of use rates are between 3 and 15 times national rates for youth peers.

Ethnicity

Survey findings from 1999 reveal ethnic-racial differences in use rates for some substances. (Johnston et al., 2000) Across all three grade levels surveyed – 8th, 10th, and 12th grades – Black youngsters have substantially lower rates of use of a number of licit and illicit drugs than Whites. These lower rates include any illicit drug use, most of the specific illicit drugs, alcohol, and cigarettes. In fact, Black adolescents' use of cigarettes is dramatically lower than for Whites, a difference that has emerged since 1975.

Hispanics have rates of use that tend to fall between the other two groups in 12th grade – usually closer to the rates for Whites than for Blacks. (Hispanics do have the highest reported rates of use for some drugs in 12th grade – crack and ecstasy – and their level of heroin use is equivalent to that of Whites.) But in 8th grade Hispanics tend to come out highest of the three racial/ethnic groups on nearly all classes of drugs, including alcohol (amphetamines being the major exception). One possible explanation for this change in ranking between 8th and 12th grade may lie in the fact that Hispanic youngsters have considerably higher school dropout rates. Thus, more of the "drug-prone" segment of that ethnic group may leave school before 12th grade than in the other two racial/ethnic groups. Another explanation could be that Hispanics are more precocious in their initiation of these sorts of behaviors.

Buttressing data from Johnston et al (2000) are findings from CDC's YRBS research from 1997. CDC reports the following relationships for ethnic-racial differences: White students were more likely than Black or Hispanic students to report driving after drinking alcohol; current and frequent cigarette use; initiating cigarette use before 13 years of age; cigarette use on school property; smokeless tobacco use; smokeless tobacco use on school property; lifetime and current alcohol use; episodic heavy drinking; lifetime and current cocaine use; and lifetime "crack," steroid, inhalant, and other illegal drug use. Hispanic students were more likely than White or Black students to report riding with a driver who had been drinking alcohol; driving after drinking alcohol; current cigarette use; lifetime and current alcohol use; episodic heavy drinking; lifetime and current cocaine use; lifetime "crack," steroid, inhalant, and other illegal drug use; initiating cigarette, alcohol, marijuana, and cocaine use before 13 years of age; alcohol and marijuana use on school property; and being offered, sold, or given an illegal drug on school property.

Among Native American youth, all substance use rates are extremely high and may be related to acculturation (Schinke, 1996; Schinke et al., 1986; Schinke, Schilling, & Gilchrist, 1986; Schinke et al., 1988; Schinke, Singer, Cole, & Contento, 1996).

Hispanic youth too appear vulnerable to acculturation influences on substance abuse. Research reported in 1998 notes an association between high acculturation and use of cigarettes, alcohol, and marijuana among Hispanic adolescent girls (Fraser et al., 1998).

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